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FIREMEN

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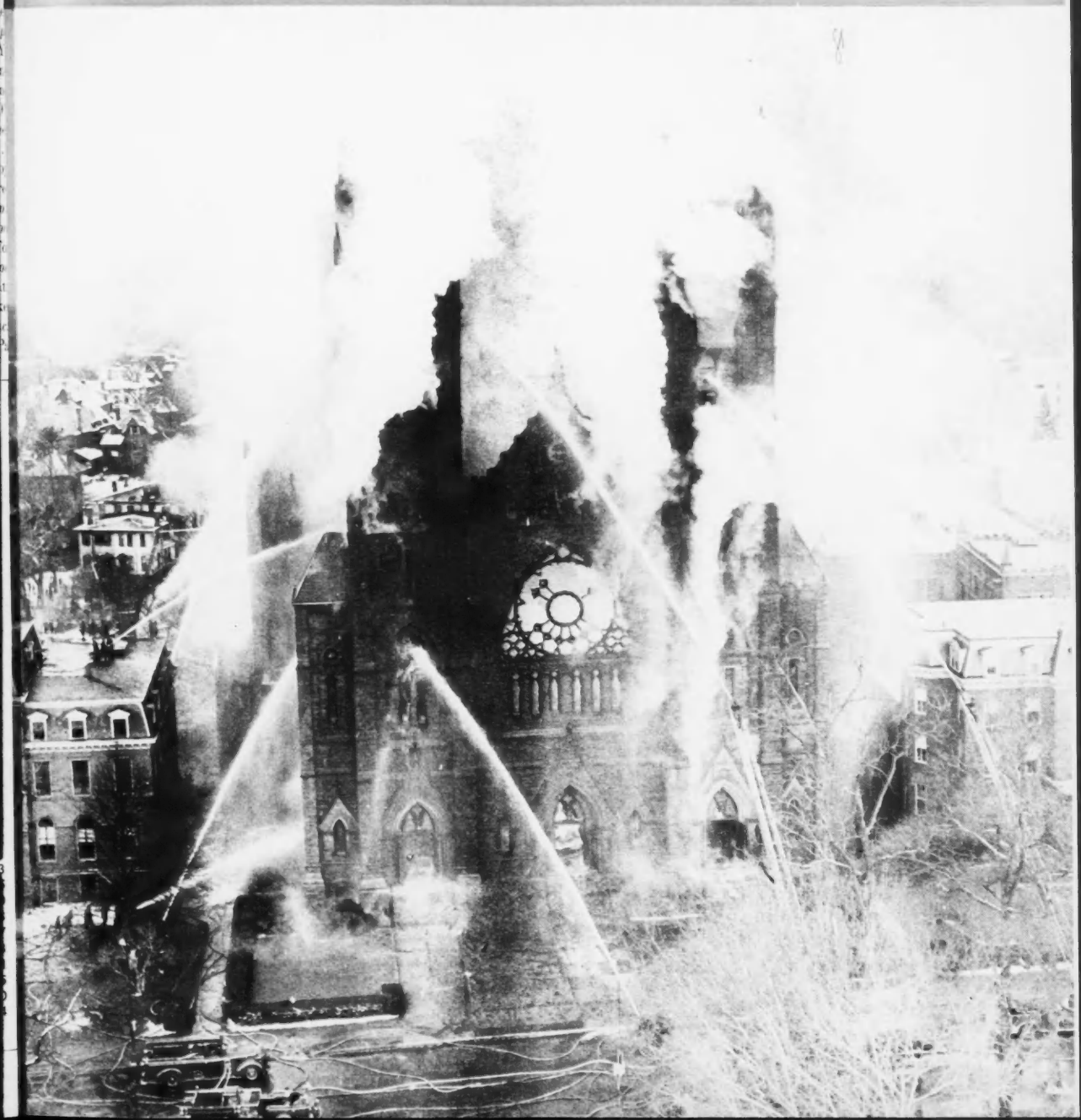

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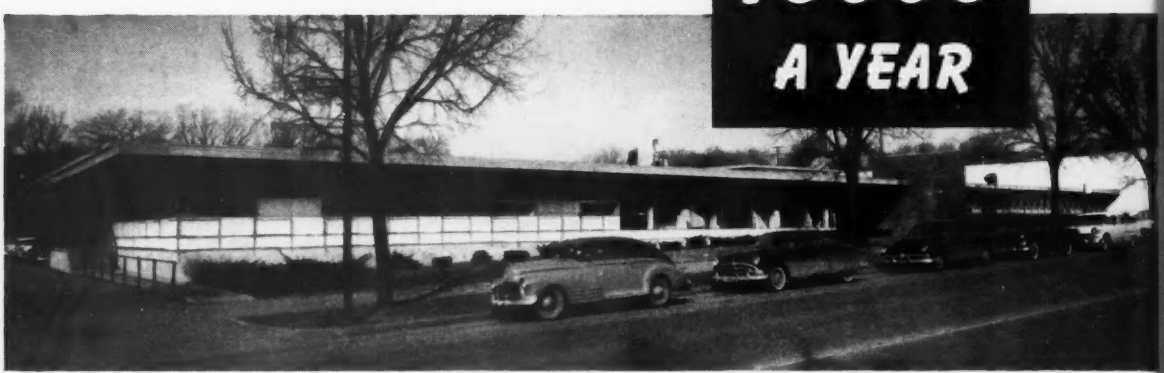

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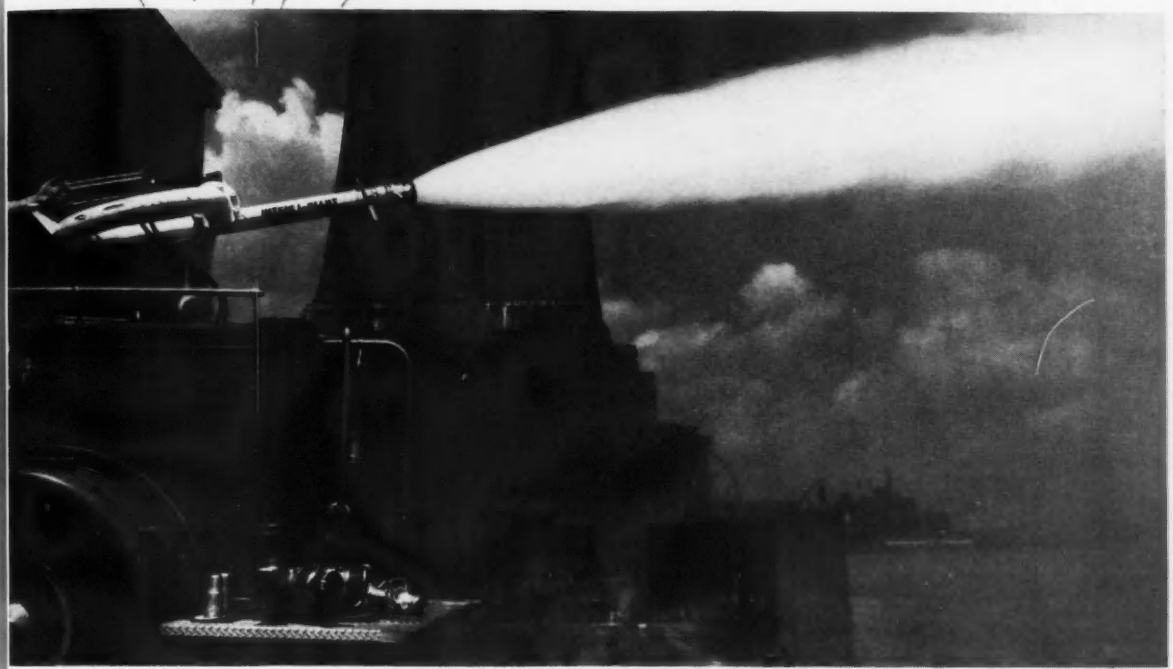

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Photos courtesy Philadelphia Fire Dept.

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Volume 24 — Number 2

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Published monthly for the fire service members of the
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Cover Picture

On successive days last December, the Hartford, Connecticut, Fire Department, headed by Chief Henry G. Thomas, responded to two serious fires involving churches. (See pages 8–11.) In each case, the fire, starting from an unknown cause, gained considerable headway through non-firestopped wall and ceiling spaces before it was discovered. Responding fire fighters not only found a valuable church structure well involved by fire, but also had the frustrating experience of knowing where the fire was progressing and being unable to hold it in check. (Cover picture by Hartford *Times*.)

In each case the non-firestopped wall openings provided typical flues which permitted the fire and heated gases to spread rapidly to the upper part of the building. Fortunately, in the first fire, which involved St. Joseph's Church, the fire spread was such that when flames broke through the roof, the main fire progress was confined to the roof structure.

In the second fire, which involved the huge St. Joseph's Cathedral, a tremendous amount of heated gases built up in the interior of the church along the ceiling and in undivided dust-laden attic spaces and catwalks. As soon as the fire broke into the open, it flashed throughout the structure.

The Hartford Fire Department was able to protect exposures effectively and to confine the fires to the building of origin through sound application of heavy stream equipment. As reported in the story beginning on page 8, Chief Thomas believes that all ladder trucks should be equipped with ladder pipes and that this type of equipment should be supplied by a pumper operating close to the ladder truck, with short hose lines of adequate capacity.

Through coincidence FIREMEN magazine is beginning a series of articles on using and supplying ladder pipe and other heavy stream equipment. The first of these will be found on pages 12 and 13 of this issue.

Fire Prevention Week Contest

The winning entries of the 1956 Fire Prevention Week Contest sponsored by NFPA are announced on pages 12–14 of this issue. Readers of the magazine will recall that last year this story described activities of other fire departments which may not have won a top prize in their particular classification, but which still contributed something to the cause of fire prevention. Again this year some of the best activities of a number of contest entrants are described in this two-part article. The second portion of this feature story will appear in the forthcoming March issue of FIREMEN magazine.

Fire-Police Integration

During the Conference of the International Association of Fire Chiefs in Miami, Florida, a speaker in behalf of integrating fire and police forces reported that there was integration in nearby Fort Lauderdale. Accordingly, several chiefs and the Manager of the NFPA Fire Services Department visited that city. It was found that the so-called "integration" in Fort Lauderdale consisted of a small security patrol of officers in cruising cars. The cars were equipped with first aid extinguishers and the patrol also was trained for first aid and resuscitation work which formerly was done by the fire department.

In Fort Lauderdale there is an entirely separate fire department with its own apparatus, chief officers, fire fighting personnel, training and communications. It was reported that the fire and police departments formerly shared a common radio system, but that this had not proven satisfactory, and now each department has a separate radio facility. It was also stated that the security patrol was instructed to call the fire department for any discovered fires, and there appeared to be no delayed alarms or other interference with normal fire department response.

Proponents of integration sometimes use the term loosely. It is important, therefore, to determine the degree of "integration" in a municipality, before evaluating its organizational efficiency.

Hartford Church Fires

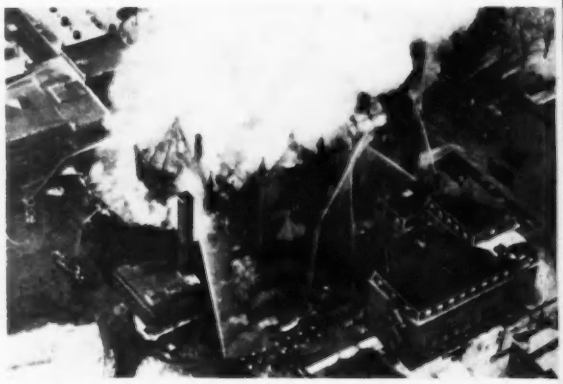
by Paul R. Lyons, Associate Editor

ON DECEMBER 30th and 31st, 1956, the fire department of Hartford, Connecticut, had to fight two of the worst church fires in the city's history. Because of their similar pattern of destruction, Fire Chief Henry G. Thomas (Vice President of NFPA and Chairman of NFPA Committee on Fire Department Equipment) stated that the occurrences were "more than mere coincidence." Investigations for arson or other possible cause are being conducted by fire department personnel and members of the Connecticut State Police. As yet, the causes have not been determined, but at least 14 persons under suspicion have been questioned, three being held under $20,000 bond.

The first fire on December 30th involved St. Patrick's Catholic Church on 265 Church Street and resulted in an estimated loss of $250,000. The second fire, discovered at 7:33 A.M. December 31st, destroyed the 64-year-old St. Joseph's Cathedral at 158 Farmington Avenue. This "Mother Church," the center of the Hartford Catholic Archdiocese, had an insurance coverage of $2,800,000 which represented 80% of a total insurance valuation of $3,542,906 placed on the structure in January 1956. Separate policies of $302,016 and $43,788 were carried on the windows and murals. Church authorities estimated that replacement cost of the Cathedral would exceed $5,000,000.

These two church fires climaxed another year of severe fire loss in religious structures. A representative sampling of NFPA fire records for 1956 shows at least 43 church fires of $50,000 or more loss had occurred across the nation during the year. NFPA's "Fires and Fire Losses Classified — 1955" indicated that at least 3,500 fires happened in U. S. churches during that year. (Final tabulation of 1956 church fires will not be completed until this coming July.) *(For analyses of fire protection deficiencies in recent church fires see NFPA Occupancy Fire Record 56-4 "Churches." Price 50 cents — Ed.)*

(Left) Interior of St. Patrick's Church after fire. The fire originated near Christmas Crib located at right of main altar. It spread through interior wall spaces to involve roof, making attack by hand lines from interior relatively ineffective. Other sections of church were well protected by fire fighters. (Wide World photo)



View of St. Joseph's Cathedral fire shortly after fire burst throughout length of structure. Heated gases built up in the interior while fire fighters vainly tried to break through interior walls and roof for effective attack. When flames burst through rotunda ceiling (within pointed dome at left) fire "exploded" through entire upper church. (Wide World photo)

For the Hartford fire department, these two incidents called for multiple alarm response and for prolonged use of heavy stream equipment under severe cold-weather operating conditions. For all fire departments, the fires illustrate once more the difficulty of gaining control of fire in large, aged structures that lack the fundamental design and fire protection features which would help to minimize fire destruction.

St. Patrick's Church Fire

Patrolman John Brownstein of the Hartford Police, passing St. Patrick's Church at 12:31 A.M. December 30, saw smoke issuing from the roof at the southwest corner of the building. He immediately used a police cruiser radio to notify fire department headquarters. At the same time, Box 17 was struck by a passing citizen. This person also notified priests in the nearby rectory who opened the church doors when apparatus responded.

First alarm response brought three 750 gpm pumpers, three 1,000 gallon pumpers, an 85-ft. and a 100-ft. aerial ladder and two deputy chiefs. Fire fighters initially made entry into the church through a side door with hand lines. Apparently the fire had started in the vicinity of a Christmas Crib located at the southwest corner of the main church floor just to the right of the large center altar. It was already burning upwards through nonfirestopped wall channels and extending to the roof deck. A second alarm was transmitted at 12:38 A.M. and a third alarm at 12:45 A.M.

Second alarm response from the Hartford fire department calls for three engine companies and a 100-ft. aerial ladder and the response of Chief Thomas. Actually the department uses two types of signals for this alarm. Signal 1-2-2 activates on-shift personnel,

signal 2-2 calls all off-shift personnel. The latter signal was used immediately for the St. Patrick's Church fire.

Third alarm response brought three 1000 gpm pumpers, two 750 gpm pumpers and a 75-ft. aerial ladder. On the 1-2-2 signal a deputy chief is stationed at headquarters where he assigns reporting off-shift personnel to four engine companies and two ladder companies held in reserve. In addition, surrounding fire departments participating in the mutual aid plan are alerted (Chief Thomas reports that he received many offers of assistance from surrounding departments for both fires but actually required the services of only one of these fire companies).

Church Structure and Fire Progress

St Patrick's Church is a brownstone structure 142 feet long, 68 feet wide and 60 feet high. In addition, it featured a 150-ft. wooden steeple towering above the front entrances. A basement and main floor both were used for church services, each having a seating capacity of 1,000 persons. Wood framing existed throughout the structure including supports for the slate-covered roof and the wooden steeple.

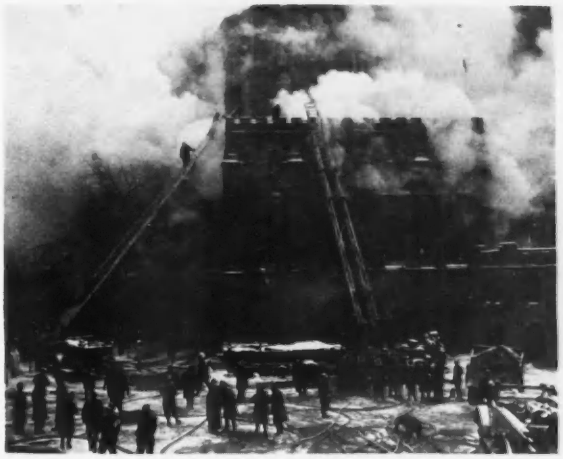
There were no fire-stops within the walls, nor were there automatic sprinklers, fire detection devices or supervision by a watchman. Five fire extinguishers were located at various points within the structure but were not of practical use for this fire.

Application of hand lines from the interior of the structure had little effect in checking the fire progress. As companies were being positioned around the exterior of the building, flames broke through the roof and began to move rapidly from the rear of the roof structure towards the front. In the initial stages of fire fighting, there was a westerly wind of 32 m.p.h. (During the 1½ hours that it took for control to be established, wind gusts up to 56 m.p.h. were recorded. Temperature, originally at 21 degrees F., fell to 13 degrees F. during the night.)

The strong wind led to rapid, full involvement of the wood-framed roof on the west side, and eventually to severe involvement of the wooden steeple. In attempting to check fire progress from the outside, fire fighters manned three ladder pipes, three portable deluge guns, (with 1½-in. tips) and five hand lines (with 1-in. tips). Close exposures were protected effectively.

Chief Thomas reports that this particular fire points out the desirability of using ladder pipes on all aerial ladders. In his fire department, the ladder pipes are equipped with 3-way siamese with 3-in. inlets, all gated. These are supplied by both 3-in. and 2½-in. lines. The department also follows a procedure of placing pumpers close to these ladder trucks to assure adequate supply of water for the ladder pipes. In this instance there was excellent water supply in the neighborhood, with six hydrants located within 500 feet supplied by a grid of 16-in. and 10-in. mains. It was estimated that 500,000 gallons of water were used in establishing control of the fire.

Fire destruction was confined to the roof, the tower and a portion of the west wall of the church. The main floor was covered with burned debris. Salvage operations were begun immediately and it was estimated that services could be held in the lower church,



Problems of fire attack which faced Hartford Fire Department are illustrated by this photo, showing rear of Cathedral. Ladder pipes could not be directed effectively to check advance of fire through interior walls and ceilings. (*Hartford Times photo*)

which escaped severe damage, within four weeks. Loss was estimated to be more than $250,000, but with principal destruction confined to the roof and tower the structure can be restored.

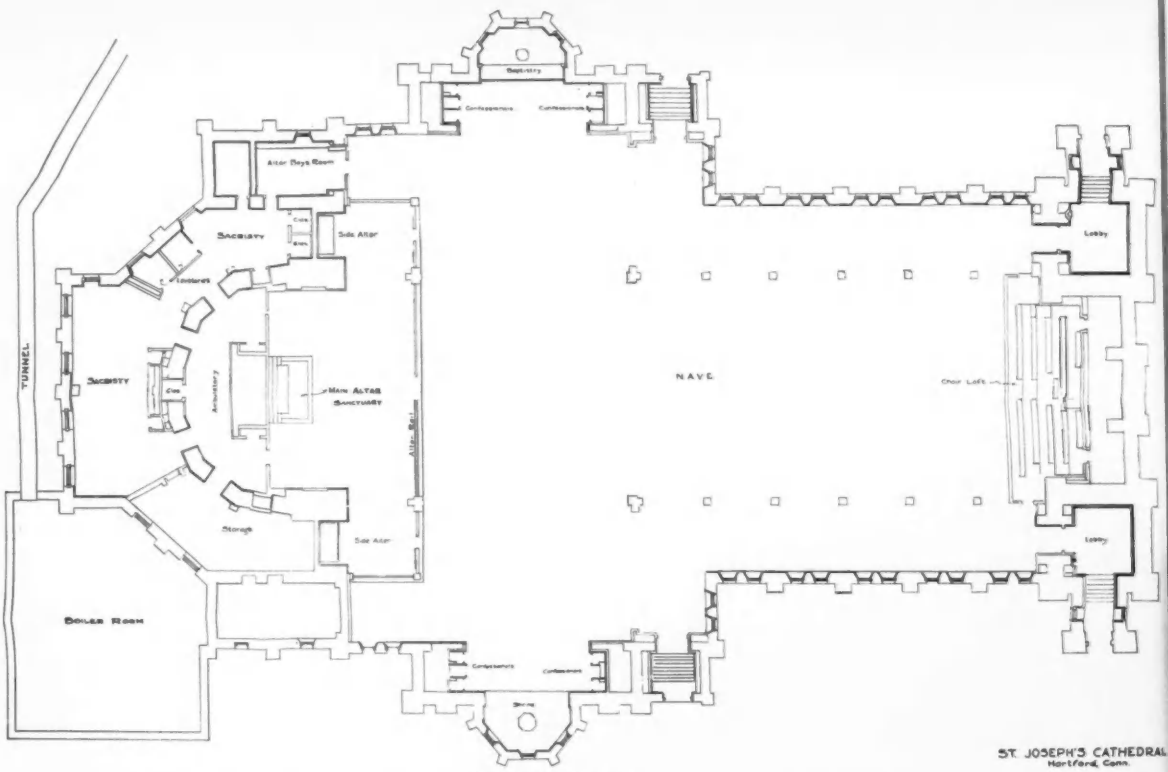
St. Joseph's Cathedral Fire

St. Joseph's Cathedral was a brownstone structure of Early Gothic design, 200 feet long and 130 feet in width. The main church was approximately 90 feet high but in the front, twin towers housing carillon bells, rose to a height of 240 feet. In the center of the cruciform structure was a transept running east and west while in the rear a semi-circular apse rose to a point above the main altar. The Cathedral was started in 1882 and was completed after 15 years of construction at a cost of $500,000. Between 1937 and 1939, extensive, costly renovations were made, including the sinking of new foundations and the addition of wire lath and plaster to the interior finish.

It housed many valuable art items including 72 stained glass windows, a ceiling featuring wood from every country of the world, a gold leaf rotunda, a 65 stop Austin organ, and many treasured religious articles. Throughout the church, wood framing was used for the walls and roof structures. There was no fire stopping in the joist channels and a number of large horizontal and vertical concealed spaces existed. The large rotunda covering the area above the main floor altar included undivided attic space used partly for storage.

Story of the Fire

According to reports, the building superintendent first smelled smoke when he opened the church at 6 a.m. Father Francis S. O'Neill, chaplain of the fire department, also noticed smoke when he began Mass at 7 o'clock on the altar of the main church. Chief J. P. McSweegan of the Hartford fire department, attending services, was informed of a haze to the right of the main altar when Mass was being completed. He, Father O'Neill and the building superintendent immediately went to the basement where considerable



Sketch of basement of St. Joseph's Cathedral. Fire was discovered in the ceiling just in front of main altar. Possible places of origin were the closet shown below altar boys' room, or an electrical panel board outside storage room at lower left. From these sections intense fire developed to move upward through walls. Outline of main floor was similar to above sketch. (Scale — 1 inch equals approximately 35 feet.)

smoke and intense heat was evident in the vicinity of the center altar. Chief McSweegan immediately told the superintendent to pull a box alarm from Box 631 on the church property. This alarm registered at fire department headquarters at 7:33 A.M. At the same time, a telephone alarm was received from the rectory. Ten minutes later, a second alarm was struck followed by a third alarm at 8:17 A.M.

First arriving fire fighters entered the basement of the structure and Chief McSweegan indicated the portion of the ceiling where the fire could be heard "roaring." Attempts were made to open up this section to apply streams from 2½-in. hand lines, but the fire rapidly moved in the ceiling and walls beyond reach of effective attack. The wire lath used on the plastered walls made such "opening up" difficult.

As fire fighters worked upwards through the various floors in the rear of the structure, the fire continued to progress through the nonfirestopped wall and ceiling channels and other concealed spaces to the attic above the rotunda. In the meantime, other men were attempting to ventilate the roof of the rotunda and were operating streams from five ladder pipes and four deluge guns. It was estimated that 1,500,000 gallons of water were used during the fire attack of a four-hour period.

At approximately 10:45 A.M. the fire broke through the ceiling of the rotunda and the ceiling collapsed on the floor above the main altar. Almost immediately there was a violent burst of flame which raced along the entire upper interior structure and undivided dusty attic spaces. It completely involved the roof framing and practically exploded into the twin towers at the front of the church. The speed of involvement duplicated conditions of a back draft. The roof and large portions of the walls were completely involved, together with the choir loft where the organ was housed and the twin towers from which the carillon bells dropped to the main floor. Collapse of the roof structure led to thorough destruction of the main floor and ex-

***(Right)* View of main floor of Cathedral after fire, looking towards front entrance. Organ loft was demolished as were rose window, carillon bells and all exposed combustible materials.**

(Hartford Times Photo)

posed wooden columns, floor joists and other combustibles.

As soon as full involvement occurred, fire fighters concentrated on successfully protecting unsprinklered exposures including a convent and rectory, both within 30 feet of the church. Water supply was excellent, with four hydrants located within 500 feet served by 20-in. mains. Hydrant pressure was 80 pounds and pumpers were operated at pressures varying between 150 and 200 pounds to supply the ladder pipes and deluge guns.

Response to this fire duplicated the response to the St. Patrick's Church fire on the preceding day, that is, 3 engine companies, 2 ladder companies and two deputy chiefs came in on the first alarm; 3 engine companies, a truck company and Chief Thomas on the second alarm, together with alerting of off-duty personnel; and 3 engine companies and a truck company responding to the third alarm.

Altogether, 13 pumpers, 4 aerial ladders and 3 chief officers operated at the fire. Since roll call of the Hartford fire department is at 8 A.M., this particular incident occurred with a large number of men immediately available for duty. A total of 228 fire fighters participated in the multiple alarm response. While mutual aid companies were alerted on the second alarm, only one fire company from the West Hartford Fire Department was called to this fire. The deputy chief at headquarters in charge of assigning off-shift personnel to reserve apparatus eventually supplemented the response for the Cathedral fire with two extra hose companies.

Other Recent Fires

Philadelphia, Pennsylvania, December 28, 1956. Deputy Fire Commissioner, Chief of Department George E. Hink of Philadelphia received a citation as "Man of the Week" for the Department's handling of this fire. The four-story and basement wood-joist and brick building housed 36 stores, offices and shops. Fire started in a first-floor shoe repair shop, then spread throughout the building. Eventually "9-alarm" response was required, including 15 chief officers and 375 fire fighters. "Master streams" from deluge sets and other heavy equipment were used for fire attack and protection of exposures. Loss was estimated at more than $250,000. *(Wide World Photo.)*

Englewood Cliffs, New Jersey, December 23. Nine fire departments participated in mutual aid response when this combination restaurant and banquet hall became involved by fire. A delayed alarm allowed the fire to spread throughout the cellar and the main floor before the first apparatus could be summoned. Heavy wind helped the fire to spread through nonfirestopped walls and undivided attic space. Chief George Mundorf reports that poor hydrant spacing was one of the factors that led to this fire loss of approximately $350,000. *(Associated Press Newsphoto.)*

Dallas, Texas, December 25, 1956. Chief C. N. Penn of Dallas reports that fire loss of at least $155,000 resulted when this freight line terminal became involved. Fire apparently started in a trailer van and spread to involve other trailers and the office building. Fire fighters made good use of tarpaulins for salvage purposes. *(United Press Photo.)*

Freeport, Illinois, December 15. Chief Raphael J. Pontious reports that this school fire was set intentionally by a 14-year-old boy. It had progressed for about an hour before the fire department was notified. By the time apparatus responded, the fire had gained headway between nonfirestopped wall and floor spaces and reached the attic. Despite attack by four engine companies, a ladder company, and a rescue squad unit, fire loss of more than $130,000 resulted. *(Freeport Journal-Standard Photo.)*

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MILITARY DIVISION (Based on year-round fire prevention activities).

The Presidio of San Francisco, California — U.S. Army

Pepperrell Air Force Base, Newfoundland — U.S. Air Force

Naval Ammunition Depot, Hingham, Massachusetts — U.S. Navy

Vancouver Wireless Station, Ladner, British Columbia, Department of National Defence — Canada

GOVERNMENT DIVISION (Based on year-round activities). The judges felt that participation in this newly established division was too limited this year to warrant selection of a Grand Award winner. Accordingly, they designated the following entrants as worthy of Honorable Mention for their 1956 programs:

National Reactor Station, U.S. Atomic Energy Commission, Idaho Falls, Idaho

Suffield Experimental Station, Defence Research Board, Department of National Defence, Ralston, Alberta, Canada

★ ★ ★

Winners of the 1956 FIRE PREVENTION WEEK CONTEST!

★ ★ ★

SPECIAL RECOGNITION

(Although the following entries did not fall within any Contest category, the judges felt that the activities represented contributed materially to improved public fire safety in North America during 1956).

State of Tennessee . . . for outstanding effort by State Fire Marshal Arch E. Northington in assisting and encouraging the most effective observance of Fire Prevention Week by Tennessee communities.

Province of Quebec (Francis X. Ahern, Fire Commissioner) for its successful promotion of FPW campaign which resulted in the highest number of communities . . . 390 . . . participating among all States and Provinces in the 1956 Contest.

Cook County, Illinois (Dick P. Skaer, Chairman, Cook County Contest Committee) and Montgomery County, Maryland, (Charles H. Howe, Jr., Fire Marshal) for outstanding county-sponsored FPW programs.

U.S. Post Office Department (Eugene J. Lyons, Assistant Postmaster General) and U.S. Department of Defense because of successful support and coordination of effective fire prevention activities among operational elements in each department.

U.S. General Services Administration (David S. Phillips, Assistant Commissioner for Buildings Management) for outstanding improvement in year-round fire prevention activities.

Ford Motor Company for the most outstanding industrial fire prevention program.

BY NOW, the names of the winners of the 1956 Fire Prevention Week Contest have been announced throughout North America. The Grand Award winners may be just recovering from the elated feelings of triumph and satisfaction that come from achieving a much-desired goal. Fire chiefs of municipalities whose entries placed at the top of their respective classes, or "almost made it," also have reason to be proud of the work of their personnel and their contribution to the nation's fire safety. (*Winners of the various classifications will be announced in NFPA "Fire News." A complete listing will be sent to all Contest entrants and is available free on request to the NFPA Public Relations Department — Ed.*)

Actually, every fire department, industrial plant, military or government organization that sent an entry to be judged in the Contest has a right to some feeling of achievement. By the simple act of describing their Fire Prevention Week activities in a well-prepared document and submitting an entry for comparison with the efforts of other municipalities, other industrial plants, or other military or government groups, they entered the records, before an impartial, international board of judges, for criticism and evaluation against the efforts of many competitors. It takes a certain amount of courage to summarize your best efforts for examination by a group of strangers and say, in effect, "Here's what we have done. How does it rank with what others are doing?" . . . and take the chance on triumph or disappointment.

The 1,458 Contest entrants reflect a tremendous amount of effort, ingenuity and community or organization leadership in the interest of fire prevention. True, some entrants appear to have the knack of organizing sound fire department inspection programs, of picking the top citizens of a community and making an effective "task force" for Fire Prevention Week, or of projecting unique and effective leadership into an industrial or governmental organization for a prolonged fire prevention drive throughout the year.

However, ingenuity and leadership were not demonstrated by the top entrants alone. Throughout the

Initial screening of more than 1,000 entries is accomplished by personnel of NFPA Public Relations Department and other members of the NFPA Staff. This facilitates sorting of the entries into their proper division and classification of municipalities.

(Left) Final judging by impartial board allocates points for each category of submitted entry. Points are then added up to determine winning entries. Here Chief Albert Kimball, of Hingham, Massachusetts, representing International Association of Fire Chiefs, examines an entry. At left is John A. Neale, President of NFPA and Chief Engineer, National Board of Fire Underwriters.

thousand-and-a-half volumes submitted for the Contest were reports of some new, unusual and thorough techniques and activities which undoubtedly focussed public attention on the tragedies and costliness of fire destruction. The only conclusion that can be drawn from a survey of the Contest entries is that the whole North American Continent-wide effort represented by Fire Prevention Week is worthwhile. It means that some lives will be saved, some children will escape the terror of burns, and some home or factory will continue to exist because fire has been prevented through public education.

In this issue and in the next issue of FIREMEN magazine we will list some of the activities featured by fire departments and other organizations to focus public attention on the need for fire prevention and protection. Readers are urged to study these listings carefully.

Think of what your fire department or industry accomplished during the past Fire Prevention Week. Compare those achievements with what others have done. Then make your plans to develop a better program for 1957. And after the next Fire Prevention Week passes, summarize your accomplishments and submit an entry to the Fire Prevention Week Contest, sponsored by the NFPA Committee on Fire Prevention and Clean-Up. Summer issues of FIREMEN magazine will announce Contest dates and availability of entry blanks.

If your fire department's efforts achieve a Grand Award for your municipality, you can be sure that the NFPA will tell the story to the world!

Successful Fire Prevention Week Activities of 1956

Jacksonville, Florida . . . produced own twenty-one minute color film "Freddy the Fire Bug" and used film to interest and educate all community elements throughout the FPW campaign.

New Brunswick, New Jersey and Toledo, Ohio . . . made "blocked exit" fire drills a main feature of their school Fire Prevention Week activities; New Brunswick also employed color film of previous year's campaign as 1956 promotional tool.

San Diego, California . . . made up slides of actual fires and used them as background for twenty-second television spots throughout FPW.

Gary, Indiana, Jersey City, New Jersey and Cicero, Illinois . . . are engaged in extensive community rehabilitation programs and each used Fire Prevention Week as an important supporting tool in its program.

Memphis, Tennessee . . . city's cleaners and laundries used paper garment bags and shirtbands imprinted with FPW slogan and poster art.

Louisville, Kentucky . . . fluorescent red string bow ties imprinted with "Fire Prevention Week Oct. 7 thru 13" awarded to 130 members of city's Fire Prevention, Council members and worn by each as mark of distinction during campaign.

Detroit, Michigan . . . used large outdoor advertising boards extensively — placed 92 boards (24-sheet) around city and used same art in transit car cards.

St. Louis, Missouri . . . 85 officers and men in fire department public speaking and public relations classes given assignment to prepare and make addresses and demonstrations before all of city's schools and many other organizations — instructed to use own initiative in making presentations most interesting and most effective; distributed 125,000 home inspection blanks which included extra question offering free home inspection by uniformed firemen if requested — over 1,500 home owners did so.

Philadelphia, Pennsylvania . . . city's "Two Week" FPW efforts aided in both planning and execution by 25 member public relations advisory group from city's newspapers, radio and television and industry; a major radio station during FPW reported all fire alarms for a 24-hour period even interrupting regular programs to do so. Air National Guard jet used to skywrite large check mark in keeping with city's FPW theme of "Check Fire."

Cincinnati, Ohio . . . urged everyone in city during FPW to answer phone with "please prevent fires," conducted "fire targets" guessing contest in suburban weekly papers as FPW feature; 700 selected members of city's school safety patrols spent "a day at the fire house" in groups of 20 to each of department's stations where they were indoctrinated in fire department facilities and activities.

Minneapolis, Minnesota . . . extensive junior fire department gave talks in home rooms and school assemblies during FPW and generally high-lighted their activities and materials during campaign; uniformed firemen concentrated on city's second grades throughout week — lectured on and demonstrated rubber clothing, axe, masks and model apparatus.

San Antonio, Texas . . . distributed 300 kits of assorted fire prevention leaflets and materials to the city's school libraries for the children to use as references in composing their Fire Prevention Week essays. Mr. Sparky, fire department Dalmatian

mascot, and Mrs. Sparky, Dalmatian mascot of nearby Ft. Sam Houston, cooperated by presenting area with Sparky juniors in time for FPW.

Anchorage, Alaska . . . states openly that all of FPW devoted to children — over 225 pupils on radio during week; 200 winners of poster contest interviewed on television; king and queen of FPW selected from youngsters and featured as principal campaign speakers throughout the year.

Jamestown, New York . . . conducted night watchman's school for local plants and also inspected each plant in company of plant watchman; treated all city's service clubs to fire station luncheons and fire fighting demonstrations afterwards; fire department sponsored scrap paper drive and devoted resulting funds to FPW parade.

Wausau, Wisconsin . . . fireman dressed as Sparky lectured at school assemblies, schoolrooms and at outdoor demonstrations; featured a "Mrs." Flame FPW queen instead of traditional "Miss" Flame; timely tie-in with universal election interests by handing out cards "A vote for Sparky is a vote for fire prevention."

Billings, Montana . . . high school students played "water ball" using fire hoses.

Great Falls, Montana . . . conducted photo contest during FPW to come up with the best fire prevention conducted pictures of displays, parades, etc.

Evansville, Indiana . . . fire department and civil defense volunteers washed and cleaned all city's alleys night before FPW.

Salt Lake City, Utah and Vancouver, British Columbia . . . firemen in house to house distribution of inspection blanks took names of all homeowners wanting home inspection or offered to accompany those requesting help in inspecting own homes.

Fort Wayne, Indiana . . . fire department faked a fire in downtown building with smoke bombs and red lights as a FPW stunt — advises other departments to be ready to turn in own alarm as Ft. Wayne bystanders never did.

Nashville, Tennessee . . . huge FPW parade — 3,000 children, 3.5 miles long and 51 floats; planted 17 crosses representing year's fire deaths in city park and taps blown over them 9:00 A.M. every FPW day; fire department presented demonstrations at crippled children's home; conducted special fire prevention clinics all week for hospitals, nursing homes, housewives, schools, hotels, theatres, industries.

Flint, Michigan . . . fluorescent window sticker now distributed in course of dwelling inspections both for children and for handicapped persons.

Spokane, Washington . . . local J. C. Penny and Company outlet as its FPW contribution stenciled Sparky's facsimile and slogan "Don't Give Fire a Place to Start" on shopping area store windows.

(*Right*) Fire Prevention Week Contest judges met on December 17 in the NFPA offices. Shown above examining representative entries are, left to right: A. Leslie Ham, manager, Dominion Board of Insurance Underwriters, Canada; O. E. Ringquist, vice president, Liberty Mutual Fire Insurance Company, and vice president, Federation of Mutual Fire Insurance Companies; Chief Albert W. Kimball, Hingham (Mass.) Fire Department; Percy Bugbee, general manager, NFPA; E. C. Wood, president, Imperial Tobacco Company, Canada; John A. Neale, chief engineer, National Board of Fire Underwriters, and president, NFPA.

Salina, Kansas . . . extensive and well planned classroom visit program using firemen instructors and teacher evaluation of instructors' efforts to help improve future presentations.

Englewood, Colorado . . . 2,000 youngsters in FPW kiddies' parade rewarded with ice cream bars afterwards — also an adult parade later in week; city's FPW queen won prize of trip to New York and appearance on network television shows.

Tuscaloosa, Alabama . . . stand-up signs placed on sidewalks all around town during FPW featured various fire hazards.

Watertown, New York . . . local tailor inserted FPW lapel buttons in all suits cleaned during week.

Muskegon, Michigan . . . sponsored 60-mile parade through Muskegon and five other neighboring communities.

Sacramento, California . . . used Fire Prevention Week to kick off home inspection program.

Fall River, Mass. (also *Spokane, Washington and Vancouver, B. C.*) . . . arranged with local postmaster for cancellation of mail during FPW with special fire prevention or FPW "die hub."

Richmond, Virginia . . . all posters and stationery carried illustration showing a Richmond fireman and his three children — fireman was critically injured in line of duty and was honored during 1956 FPW; as publicity stunt two top fire companies in fire department competition honored by one winning right to set house on fire and other to put it out.

Utica, New York . . . stationed a different piece of apparatus downtown each day and displayed its equipment spread out on sidewalk.

Phoenix, Arizona . . . posted "fire loss meters" prominently on two buildings and illustrated also in papers indicating number of fires during FPW.

Providence, Rhode Island . . . made special FPW inspection of 55,662 homes; awarded Sparky doll to first FPW baby; conducted children's contest seeking identity of pictures of fire fighting apparatus and tools, also adult contest on identifying pictures of both present and former fire stations.

Albertville, Alabama . . . city schools elected a "Miss Fire Department"; local weekly newspaper changed its name FPW to "Fire Reporter" and concentrated issue on fire prevention subjects.

Cedar Falls, Iowa . . . local Amvets had Sparky cast in concrete — 800 lb. statue now stands in front of fire station; Fire Prevention Week used to initiate Church Fire Safety Council; also started annual fire prevention day breakfast for businessmen and fire department.

Benton Harbor, Michigan . . . released helium balloons with gift certificates during FPW.

El Segundo, California . . . made large animated copy of fire prevention ad released previously by advertising council showing gambler and wheel of chance — wheel had colored lights, rotated and pointed up slogan, "Do You Gamble with Fire?"

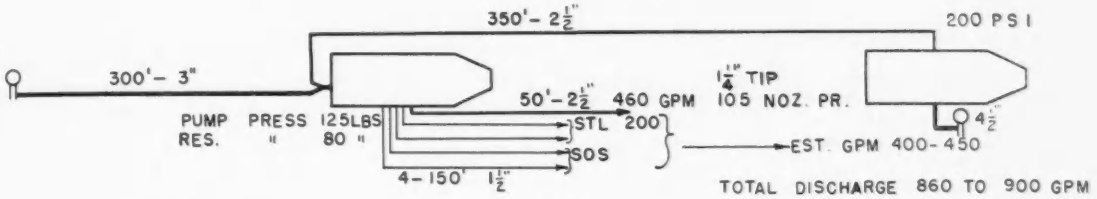
Greenbelt, Maryland . . . center of town window display featuring children's FPW posters and fire fighting equipment was entitled "Sparky's Hall of Flame."

Springfield, Missouri . . . FPW goal of approved trash burners to cut down on area's grass and trash fires.

Irvington, New Jersey . . . FPW used to kick off first in-service home inspection program and also first formal school fire prevention effort.

Hammond, Indiana . . . fire inspectors and safety council spot checked city's TV antennas for proper grounding and installation — found only 18 of 150 correct.

Backing Up Pre-connected Lines



FOR approximately fifteen years the Glen Echo, Maryland, Volunteer Fire Department, headed by Chief Joseph A. Giammatteo, has used pre-connected 1½-in. lines backed up by a 2½-in. line for initial attack on fires. Through experience and practical operations on the fireground, the Department has altered and improved its techniques of utilizing these attack lines and of providing adequate water supply to the pump.

Recently, members of the Department converted a 1947 pumper for the specific purpose of providing ease of hook-up and ability to put four pre-connected lines in service quickly. Prior to conversion, this pumper had one large bed which held 1,600 ft. of 2½-in. hose. Changes made were:

A 2½-in. intake was installed at the rear step. Attached to this was a 2½-in. Siamese with clapper check valves on each intake. Four bins were built crosswise on top of the engine just back of the pump, with each bin capable of holding 200 ft. of 1½-in. hose. Hose rollers were installed to permit the 1½-in. lines to be removed quickly.

Using standard pipe fittings, an outlet manifold was attached to the 2½-in. outlet on the pump housing. From this, separate 1½-in. pipes led to each of the four crosswise hose beds. The 1½-in. hose was pre-connected to these pipes with 45 degree elbows, two inclined to the right side of the apparatus and two to the left. The 2½-in. intake pipe as well as the four 1½-in. supply pipes were all fitted with gate valves at the pump operator's panel.

Three hundred feet of 3-in. hose was substituted for 2½-in. hose at the top of the load, so that it would be dropped off first at the hydrant.

The department has also developed an evolution for using another pumper to back up the hose wagon. In the sketch above, the hose wagon at left has the four pre-connected lines in operation. When additional supply is needed, a second pumper lays out another supply line from the second intake on the Siamese to the next hydrant, hooks up and starts pumping. In the sketch, the supply line to the hose wagon consists of 300 ft. of 3-in. hose, while the line from the back-up pumper is 350 ft. of 2½-in. hose. This back-up pumper operated at 200 lbs. pressure. The sketch represents a layout used in a recent test by the Fire Department.

All four pre-connected 1½-in. lines were placed into service, together with a 50-ft. length of 2½-in. hose with a 1¼-in. straight stream tip having 105 lbs. nozzle pressure. It was estimated that the four fog nozzles on the 1½-in. lines provided a total flow of 400 to 450 gpm, while the 2½-in. line provided 460 gpm. Chief Giammatteo reported that the back-up pumper was supplying about 400 gpm, while the 3-in. hose from the hydrant was supplying about 460 gpm. He also states that the Department has operated very successfully with this layout.

The Glen Echo Fire Department has a small paid crew operating in the daytime, while volunteers man the apparatus at night. Thus with the pre-connected lines, the first pumper responding to a fire can get a strong initial attack, even if arrival of the back-up pumper is delayed.

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The heart of the SUPER VACUUM Smoke Ejector is the patented propeller. Conventional fans produce a chopping, recirculating action. In contrast, the SUPER VACUUM propeller is a perfect spiral air screw which creates a vacuum... suction is created over the entire face of the propeller and the air or smoke is discharged in a high velocity spiral. There are no dead spots.
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Full Capacity from Ladder Pipes

Heavy Spray Stream from Large Solid Stream Tip on Ladder Pipes

THE photographs on these pages show a simple technique for obtaining maximum flows from a ladder pipe. The method, like other improved operating techniques for which the department is noted, was developed by Battalion Chief A. M. Grunwell and other officers and men of the 7th Battalion, Washington, D. C., Fire Department, which he commands. It was recently demonstrated by units of the Battalion and is reported in this first of a series of articles.

The method employs one engine company equipped with two pumpers and a 100 ft. tractor-trailer type aerial ladder. It utilizes full volume available from a single 1000 gpm pumper at a hydrant, with a second pumper at the base of the ladder to boost the pressure. The procedure has been developed into a routine fireground evolution so that all a chief has to do is to indicate where he wants the ladder pipe and designate an engine company to supply the layout.

In the demonstration at which the pictures were taken, the hydrant used provided 1435 gpm which was discharged from the ladder pipe by a single engine company supplying the truck company with water. Most of the story is told in the picture captions. Obviously, all standard precautions such as jackknifing the ladder truck, using ground jacks (if available), and securing the lines of hose to the ladder should be carried out.

As in other ladder pipe operation, if horizontal movement of the ladder pipe stream is desired it should be provided by rotation at the turntable by hand controls, or as otherwise recommended by the ladder manufacturer. If rotation of the turntable is to be made when discharging substantially more than 1000 gpm, it is recommended that pressure be reduced at the pump spotted at the base of the ladder. As should be well known, ladder pipes should always discharge in the direction of the ladder beams so as to avoid side stresses on the two beams.

This shows the bed ladder pipe discharging the full capacity of the hydrant. Note that the truck is jackknifed for maximum stability. The "excessive" nozzle pressure from the large solid stream tip provided a heavy fog which carried for about 300 ft. and thoroughly blanketed an area of half a city block providing an effective water curtain. Lower pressure would reduce the flow and provide a more solid stream. Two 3-in. lines or a 3½-in. line from the pump at the base of the ladder is required to handle the flow.

With the truck jackknifed away from the direction of the stream, (or properly angled in the case of service type aerials), it should be practically impossible to tip the ladder over backwards. Any undue forward motion should be safeguarded by maintaining sufficient angle of elevation as well as by proper use of jacks and ground plates.

Numerous tests have shown that for maximum ladder pipe flows an inclination of 70 to 75 degrees is good practice. It is interesting that at 70 degrees a ladder extended 80 ft. not only has greater stability but more than 5 ft. greater elevation than when inclined at 60 degrees at the same extension. Or, a 75 ft. extension at 70 degrees places the nozzle higher than an 80 ft. extension at 60 degrees, as well as providing greater stability.

A plumb line weighted by a hammer was run from the top of the ladder which was extended 80 ft. with an elevation of 70 ft. above the ground. A stake was driven with the truck set before the lines were charged. With the 1435 gpm flowing, the plumb line moved toward the truck approximately 2 ft.

This shows the 750 gpm wagon-pump at the base of the ladder supplying two 3-in. lines at 200 lbs. As this old truck lacked outrigger jacks the front left wheel lifted slightly at maximum discharge.

Here is a section of the heavy spray from the large solid stream nozzle. The spray was obtained by crowding the water through the nozzle at higher than normal pressure. (Note: 80 lbs. normally provides the best solid stream. Pressures above 120 lbs. from large tips provide a good break-up for water curtains and yet good reach and volume for cooling.)

Following the standard DCFD two pump layout, the 1000 gpm pumper was connected to the hydrant with a 4½-in. "soft suction." The wagon-pump (not having a divided 2½-in. hose load) laid a single 2½-in. line which served as the initial supply. Two preconnected 1½-in. lines from the wagon-pump were immediately placed in service. The wagon pipe with 1½-in. tip was also placed in service using the maximum capacity of the single supply line from the pumper. Meanwhile the truck company was spotting the aerial for ladder pipe service.

Without delay, knowing that maximum volume was needed, the engine company stretched back two more 2½-in. feed lines to the pumper at the plug and connected these to gated inlets on the wagon-pump. The permanent ladder pipe on the bed ladder was supplied by two 3-in. lines siamesed to the ladder pipe. The two 3-in. lines were laid on the ladder and extended through the rungs about 12 ft. below the face of the pipe. In the picture the two pumpers in relay (three 2½-in. supply lines) are shown supplying three 1½-in. preconnected lines, the wagon pipe on the wagon-pump, and the ladder pipe at about 40 ft. elevation.

Rear view of the 750 gpm wagon-pump showing three 1½-in. preconnected lines off (5 are carried), three 2½-in. supply lines (one to each side and one at rear), and two 3-in. lines to ladder pipe (one off each side of wagon). The wagon pipe has been shut down to provide full volume to ladder pipe. The 1½-in. lines which discharged 125 gpm each at 100 lbs. NP were also shut down.

In order to reduce friction loss between the two pumpers to a minimum, the engine company ran a fourth 2½-in. supply line to the front pump inlet. This inlet is not gated and the ladder pipe was in service. *However, it was not necessary to shut down to make this connection.* The wagon-pump operator merely advanced his throttle temporarily until his pump was pulling a slight vacuum. The cap to the extra inlet was then removed and the fourth supply line was connected without difficulty as there was no water pressure at this inlet. The pump at the plug was taking all water available from the hydrant and discharged at 150 lbs. The wagon-pump at the base of the ladder boosted the pressure to 200 lbs.

Use of a pump at the base of the ladder has several other advantages. Friction loss calculations from hydrant to truck and up the ladder become merely academic. The pump drains provide a convenient means for draining the lines on the ladder. Normally this is extremely difficult to do when the ladder pipe is supplied through a siamese at the base of the ladder. By connecting the 3-in. lines directly to the wagon-pump the serious restriction from a siamese at the base of the ladder is avoided. The siamese is at the top of the ladder where it is most efficient.

The next evolution was capacity discharge of a portable ladder pipe on the fly ladder with a 2-in. tip. The ladder was extended to 80 ft. using the same supply set-up. With a total flow of 1435 gpm at 145 lbs. nozzle pressure measurement was made of the deflection of the top of the ladder due to back pressure. The ladder was set at 65 degrees on the inclinometer but measurements showed an actual inclination of about 62 degrees. The weight of the two charged 3-in. lines on the ladder helped to counter the back thrust. Normally, inclination of 70-75 degrees would be recommended for this operation. The picture shows the maximum stream more than 70 ft. above the ground.

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another MACK first in

Here's the first true fire apparatus with torque converter drive—Mack's new 750 gpm triple combination pumper. Competitively priced to meet the budget of most communities, this new pumper has been tested and listed by The National Board of Fire Underwriters.

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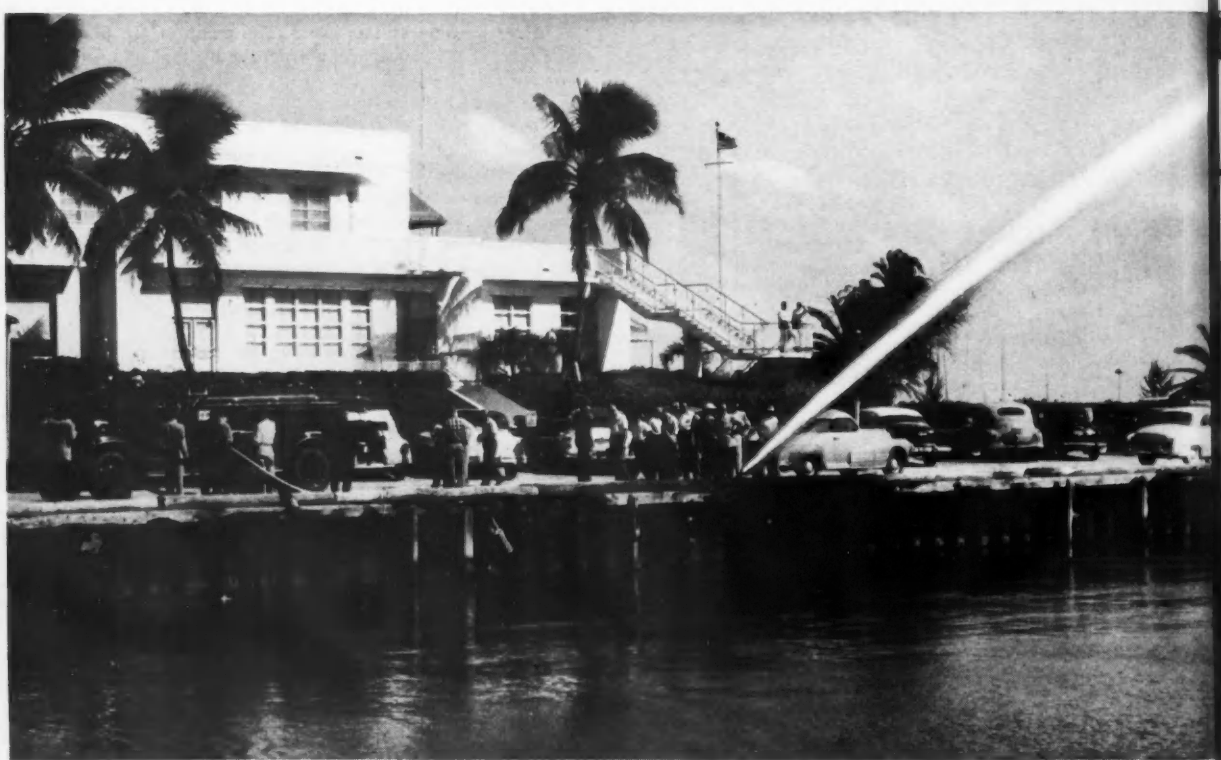

Mack's new pumper in action at the International Association of Fire Chiefs Convention held in November at Miami. Months of hard work and exhaustive testing on this new pumper were well rewarded by an enthusiastic reception at this first public showing.

COMPLETE LINE OF PUMPERS—500 to 1250 GPM . . . SQUAD AND HOSE WAGONS . . . 65', 75', 85' AERIALS . . . COMBINATION LADDER TRUCKS

TRANSMISSION . . . fire apparatus

✻ *Faster running time*

Rapid acceleration and quick stop-and-go driving without shifting means less running time between station and call...especially in congested urban areas.

✻ *Easier to drive*

"Brake and gas pedal" operation makes driving easier, safer, and more efficient for fire apparatus —just like the family car. Now, for the first time, this facility is available to firefighters—on Mack apparatus.

✻ *Reduced maintenance*

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✻ *Less driver training*

Simpler operation requires less driver training . . no need for driver familiarization with different shifting patterns . . . makes driving safer for new men . . . eliminates the costly possibility of inexperienced drivers burning out clutches or stripping transmissions.

✻ *New operating efficiency*

Absence of the clutch pedal and shift lever heralds new operating efficiency for modern firefighters. Torque converter, replacing conventional clutch, multiplies torque to the rear wheels by a 2.1 to 1 ratio in either low or high range with full engine power available at all times.

MACK *first name for* Fire Apparatus

New Headquarters in *Albuquerque, New Mexico*

Front view of Headquarters Fire Station No. 1 in Albuquerque.

ON NOVEMBER 26, 1956, the Albuquerque, New Mexico, Fire Department, headed by Chief W. A. Westerfeld, occupied a new Headquarters fire station. The 150-member department protects a community of 146,000 population. In addition to the new Headquarters, there are ten other stations housing the department's 14 pumpers of 750 and 1000 gpm capacity, two 85-ft. aerial ladders, a rescue truck, and two chiefs' cars.

The new Fire Department Headquarters is built of cement block, brick, and steel, and is fully air conditioned. On the first floor is a 55 by 70 ft. apparatus room, a 27 by 60 ft. repair shop, a 20 by 38 ft. recreation room, a 22 by 40 ft. cafeteria, a 16 by 21 ft. kitchen, a 10 by 19 ft. storage room, the 16 by 20 ft. fire alarm Headquarters office, a 10 by 15 ft. battery room, and office space for the Chief, Assistant Chiefs, and the Fire Prevention Bureau. A 10 by 16 by 40 ft. hose drying tower is located at the back of the building. In the rear of the apparatus room and elevated about 10 feet above the floor is the watch room (indicated by the words "control station") in the sketch of the first floor, shown below.

The apparatus room features two 25 ft. two-section vertical lift doors which are glass paneled with metal frames. They may be operated electrically from the watch room or from the front part of the apparatus room. Manual means of operation is also provided. The doors can be fully opened in about 14 seconds.

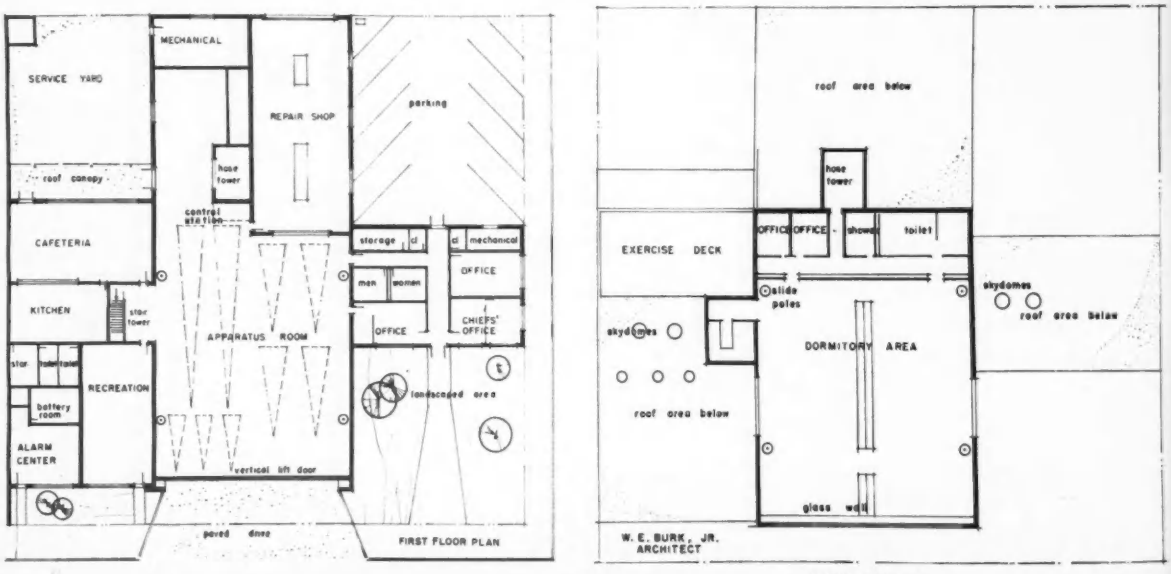
Chief W. A. Westerfeld, Albuquerque, New Mexico, Fire Department.

Dormitory space is in 55 by 62 ft. section of the second floor. There are two bedrooms for officers, washrooms for officers and men, and a 22 by 40 ft. exercise deck.

An intercommunication system is provided, with alarms announced by a Gamewell "Vocal-Alarm" and gongs.

The repair shop on the first floor is separated from the apparatus room by a 16 ft. steel roll-up door. A similar door at the rear of the shop permits trucks to enter from a wide alley.

Cost of the new Headquarters station, including land, construction, parking area, and furnishings was reported to be $390,000.



First and second floor plans of Albuquerque's new Headquarters.

View of the dormitory on the second floor.

Portion of the apparatus room which houses an 85-ft. aerial ladder, two pumpers, and chiefs' cars.

Well designed repair shop has ample lighting, a hydraulic lift, chain hoists, and rolling steel doors at either end so that trucks may be driven to the apparatus floor or taken out into the street.

Fire alarm headquarters office.

Modern kitchen and cafeteria featured in the new Headquarters building.

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One man can operate the gun. It will hold in any position.

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AMERICAN-MARSH PUMPS

Sun-bathing!

It's a swell way to get a tan — BUT it's a helluva way to dry fire hose. In fact . . . drying hose in the sun is the surest way to curtail its life expectancy. The sun bakes in contamination and, just as the sun dries your skin, it removes the natural oils from the cotton fibers and ages the rubber lining.

Hose should ALWAYS be washed after using, then dried with proper hose conditioning equipment.

FIRE HOSE DRYER ➔

The patented, electrically operated Circul-Air hose dryer circulates prewarmed fresh air through loosely coiled hose at the rate of 5 to 6 air changes per minute. Saves floor space, hard work and lengthens hose life. No other drying method is so fast — so economical — so easy to use. Circul-Air is the preferred drying method in over 4,000 leading Fire Departments.

ACCEPTED — APPROVED — RECOMMENDED

Approved by Underwriters' Laboratories . . . and Canadian Standards Association. Recommended by all leading fire hose manufacturers.

LABORATORIES APPROVED

NEW *Roto-Jet* HOSE WASHER AUTOMATICALLY WASHES — RINSES — DRAINS HOSE

ROTO-JET Washes, Rinses, Drains hose thoroughly and quickly. Hose is self-propelled. Simple, one-man operation. With or without detergents, ashes, dirt, mud and sludge are automatically scrubbed out and flushed away. Saves time. Lengthens hose life. Now . . . with Foot Pedal Operation.

THE A-Z FIRE HOSE WASHER

This modestly priced washer drains and rinses the hose as it washes. 4 Roto-Jets constantly spray hose with clean, fresh water — all sediment is flushed through collecting pan and down the drain. Turntables keep the hose OFF the floor. They're excellent for reloading truck (several lengths may be stacked on each) or loading the hose dryer.

Roto-Tables Sold Separately

Write For Folder

THE CIRCUL-AIR CORPORATION 575 EAST MILWAUKEE DETROIT 2, MICHIGAN

Letter to NFPA

Gentlemen:

I am the Fund Raising Chairman of the B——— Junior Chamber of Commerce. I am investigating the possibility of selling hand type fire extinguishers which will raise money for my organization.

If possible, I would appreciate it if you could send me a list of fire extinguishers that are approved by your organization and the address of the company that makes them. I am interested in small fire extinguishers for the kitchen and automobile that would cost between $2.00–$5.00. I will then negotiate with the individual companies.

Thanking you for your prompt assistance in this matter, I am

Very truly yours,

I. J.

Dear Mr. J.

I am afraid that we will have to discourage you in trying to find a worthwhile fire extinguisher that might be sold as a project for the B——— Junior Chamber of Commerce in the price range of from $2.00 to $5.00. There are on the market a number of unapproved types of fire extinguishers in this price range — many of them the "beer can" variety of aerosol bombs for which prices have been quoted to us as low as $1.98.

We regret, however, that these devices are not of proven reliability and we feel that, where life safety is involved, it is most important to have devices that have been tested and approved by one of the recognized fire testing laboratories. It is an unfortunate fact that this reliability does demand certain safeguards in design which increase the cost factor considerably above the $5.00 you have quoted.

Our Association, of course, regrets that the cost of approved devices does not make possible the kind of activity which you suggest. We hope, however, that you will take our recommendation not to attempt the sale of the unapproved type devices, especially because there is considerable danger that, if such a device did not perform in a manner for which it was designed, severe criticism might result and we are sure that the Junior Chamber of Commerce would not like to be placed in such a position.

Very truly yours,

George H. Tryon

ANTIQUE FIRE APPARATUS

DEPICTED IN COLOR ON HEAVY ABSORBENT COASTERS

Series of 3 different Rigs. Assortment of 2 dozen — GIFT WRAPPED $1.00 Ppd. 12 dozen only $4.00 Ppd. We will imprint your name or organization FREE in lots of 6 gross or more.

12 gross, less 10%; 24 gross, less 20%. Perfect for your next Banquet or Convention. Two beautifully framed matching 3¼ x 4 Fire Miniatures $3.00 Ppd.

HOBBY MATS

Box 145, Dept. M. Balsam Lake, Wisconsin

Just Right!

FOR COMPLETE SATISFACTION USE

WORLD FAMOUS

INDIAN FIRE PUMPS

The first cost is the last cost. No upkeep expense. No chemicals to buy. Only clear water used. That's why so many fire departments are replacing soda acid and other types of extinguishers with INDIANS. Here's a typical comment from our files:

Fire Chief S. W. Griswald of Westbrook, Conn., says: **"I cannot praise INDIANS highly enough. There is nothing else will match them."** Another Chief says: **"They are worth their weight in gold."**

Send for Catalog

Both Types Approved by Underwriters' Laboratories, Inc.

NO. 80 INDIAN LEVER TYPE Pump and Handle

No. 90 INDIAN SLIDING PUMP TYPE

For all Class A fires. Fire Chiefs say: "There is Nothing Else Like INDIAN FIRE PUMPS!"

D. B. SMITH & CO.

"FOR SEVENTY YEARS THE LEADERS"

408 Main Street, Utica 2, New York

Pacific Coast Branches:

Hercules Equipment & Rubber Co., Inc. San Francisco 7, Calif.
Halprin Supply Co. Los Angeles 15, Calif.
Fred E. Barnett Co. Portland, Ore.
Fred E. Barnett Co. Klamath Falls, Ore.
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L. M. Curtis & Sons Salt Lake City, Utah

Canadian Agents:

Brock Bros. Ltd. Vancouver, B. C., Canada
C. E. Hickey & Sons, Ltd. Hamilton, Canada
Bison Hardware Co. Toronto, Canada

NEW "QUAKER 100" is made from extra-long staple cotton, chemically treated to keep its flexibility and reduce elongation.

NOW! 1½" DOUBLE JACKET MUNICIPAL FIRE HOSE IN 100-FOOT LENGTHS!

It's new "Quaker 100"—a 600 lb. hose. And it's quick drying, easy to pack and fold!

● ***It's light!*** One coupled length of "Quaker 100" weighs only 34½ lbs.

● ***It's strong!*** Specially treated cotton provides at least 10% more strength in each warp strand woven into the jacket. (Average burst pressure per three foot length is 1200 lbs.)

● ***It's quick drying!*** "Quaker 100" absorbs 25% less water than conventional 600 lb. dacron filler hose.

● ***It goes into action quickly!*** 100 feet long, "Quaker 100" reduces by 50% the danger of couplings pulling off or snagging.

SEE THE SAVINGS! See how easy "Quaker 100" is to use and maintain! Call your Quaker-Quaker Pioneer distributor today. For free brochure, write: *H. K. Porter Company, Inc., Quaker Rubber Division,* Philadelphia 24, Pa., or *Quaker Pioneer Rubber Division,* Pittsburg, Calif.

HKP QUAKER RUBBER DIVISION
QUAKER PIONEER RUBBER DIVISION
H. K. PORTER COMPANY, INC.

Macon Says "Thanks"

DURING the past Fire Prevention Week, the City of Macon, Georgia, expressed its gratitude to the Fire Department with a unique gesture. Wives of each of the 116 Macon fire fighters were presented with a floral "thank you" in the form of bouquets, while the four single fire fighters were given cartons of cigarettes by the Retail Merchants Bureau and the Fire Prevention Committee of the Chamber of Commerce.

Accompanying the flowers was this appropriate note: "May these flowers say 'Thank you from all of us in Macon' for the important job you and your fireman husband do for us daily."

The notes to the single men said, "As you relax and enjoy these smokes, may you be reminded of the appreciation we have for you and your job in keeping us out of 'smoke' situations. Thank you very much for everything you do for us daily."

These tokens of appreciation show that the Macon fire fighters, headed by Chief Bernard H. Brown, have attained a valuable status and the respect of the community. Let's hope that many other fire departments will receive similar tributes when their communities learn what Macon did.

Henry B. Matthews, president of the Macon Retail Merchants Bureau, presents flowers to Mrs. Bernard H. Brown, wife of the Macon fire chief as Chief Brown and George Heller, chairman of the fire prevention committee of the Chamber of Commerce, watch. All wives of Macon's fire fighters were similarly honored during Fire Prevention Week.

Formula for Watershed Loss

THE recent brush fires in the vicinity of Malibu, California were estimated to have caused a watershed loss in the vicinity of fifty million dollars, not including damage to homes and other property. This figure was quoted by Dr. Keith Arnold, School of Forestry, University of California. It was obtained by use of a new formula based on cost of erosion control, reseeding, potential flood control and other factors which result in an evaluation of watershed of about $2,500 per acre.

Clay Easterly Now Chief

CLAY A. EASTERLY, former Fire Marshal of Martinsville, Virginia, has been appointed as Chief of the Fire Department in that City. He succeeds Chief James E. Minter who retired recently after 32 years of service in that office.

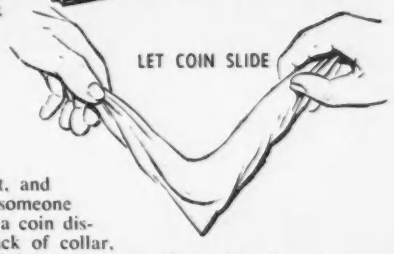
Chief Easterly is well known to fire service members for his contributions to the firemen's training programs in the State of Virginia. A native of Bristol, Virginia, he served for ten years in the Bristol Fire Department, resigning with the rank of Captain to become Fire Chief of the Volunteer Ordnance Works near Chattanooga, Tennessee in 1940. He served in that capacity until 1946, when he became State Fire Instructor. In 1949 he became Fire Marshal of Martinsville, but continued to assist in conducting the Virginia State Fire School training programs. He became Acting Chief in Martinsville last August. As Chief of Department he will also have responsibility of directing the Fire Prevention Bureau. In 1954 he was a featured speaker during the NFPA Annual Meeting in Washington, D. C.

WANTED!

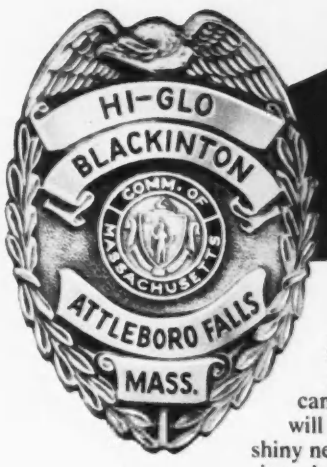
Aggressive distributors to sell nationally advertised line of fire helmets and other safety equipment.

WRITE TO BOX B
c/o FIREMEN MAGAZINE
60 BATTERYMARCH ST.
BOSTON 10, MASS.

Yours to perfect...



Twist a handkerchief in a rope-wise fashion. Tie the center in a knot, and give the handkerchief to someone to hold. You then make a coin disappear by tucking in back of collar, and when the handkerchief is untied the coin is right there in the knot. THE SECRET? — The coin is a duplicate which you hold in the fingers of your right hand. When you twist the handkerchief rope-wise, it forms a sort of tube, sagging in the middle. You release the coin and let it slide down inside this tube so it comes to the center of the handkerchief where the knot is tied.



Perfection is yours...

The perfection of a BLACKINTON *HI-GLO* badge is yours for a lifetime. *HI-GLO* is that new (almost magic) metal developed by BLACKINTON to give you fine quality badges that you can POLISH — POLISH — POLISH. It will never lose its golden finish, retains its shiny new look for the life of your badge. Polish it as hard and as often as you like. *HI-GLO's* lustrous finish remains on and on.

A ruby colored stone set in eye of eagle, optional at extra cost, gives your badge the extra touch of quality it deserves.

See for yourself — ask your equipment supplier to show you samples of the new BLACKINTON HI-GLO badges.

Most badge designs are now available in HI-GLO.

BLACKINTON

Please send me your free folders and complete information on BLACKINTON badges.

Name.....

Address.....

.....

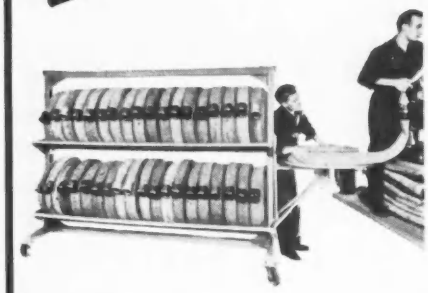
☐ I would like to know more about the new *HI-GLO* metal badges.

V. H. BLACKINTON & CO., INC., 130 Commonwealth Ave., Attleboro Falls, Mass.

BLACKINTON badges are furnished nationally through equipment suppliers and uniform manufacturers.

Porto-RAK

HOSE STORAGE AND LOADING UNIT



SAVES SPACE
•
SAVES TIME
•
SAVES WORK
•
KEEPS HOSE AND COUPLINGS OFF THE FLOOR
•
ELIMINATES CARELESS ABUSE

PORTO-RAK is the modern way to handle, store and load hose.

PORTO-RAK saves valuable space. It holds 1800 feet of 2½" hose and proportionally more of 1½" hose in an 8½' space (loading table detached). Easy, convenient to use. Roll it right up to the truck for complete hose reload — out of the way when not in use. Equipped with locking fiber-wheeled casters.

WRITE FOR FOLDER

THE CIRCUL-AIR CORPORATION 575 EAST MILWAUKEE DETROIT 2, MICHIGAN

MIDWESTERN

Safety Clothing for FIREMEN

The Original STRIPED SAFETY COAT

* New Yellow Rubber Stripes!
* Maximum Visibility!
* Maximum Durability!
* Exclusive Safety Features!

YOU deserve the BEST PROTECTION OBTAINABLE for your hazardous work of protecting life and property against fire. The Mackinaw Safety Coat with new yellow stripes is the answer! Highly visible stripes are rubberized as part of the material . . . not painted, glued or sewed on. There is no substitute for the superior quality, design, fabric texture and safety features you get by specifying MIDWESTERN!

QUALITY UNEXCELLED

For complete information on our full line of safety clothing for firemen, see your Midwestern dealer. A letter to the factory will also bring you literature and materials for your inspection.

MIDWESTERN SAFETY MFG. CO. Mackinaw, Illinois

Manufacturers of the Famous MACKINAW Safety Coats

Spring Clean-Up Kits

THE 1957 Spring Clean-Up kits for use by fire departments are now available. They will be mailed to all NFPA member fire departments, to all members of the International Association of Fire Chiefs, and to county agents of the United States Department of Agriculture Extension Service. Single copies are also available free of charge upon request to the NFPA Public Relations Department.

This year's kit will contain specially prepared releases for newspapers, radio and television stations spot announcements and the new Spring Clean-Up poster. In addition, there is a home inspection blank and a coloring poster for youngsters.

New Members in NFPA

Arizona: Tucson Fire Department, Tucson.

British Columbia: Salmo Fire Department, Salmo.

Connecticut: North Coventry Fire Department, Inc., Coventry.

Illinois: Karnak Fire Department, Karnak.

Louisiana: Jefferson Fire District No. 2, Metairie.

Manitoba: Chief A. E. Martin, St. Vital Fire Department, St. Vital, Winnipeg.

Massachusetts: Everett Fire Department, Everett; Groton Fire Department, Groton; Hudson Fire Department, Hudson; Ludlow Fire Department, Ludlow; North Andover Fire Department, North Andover.

Michigan: Bedford Township Fire Department, Detroit; Grosse Ile Volunteer Fire Department, Grosse Ile; Litchfield Fire Department, Litchfield; Macomb Township Fire Department, Mount Clemens; Buena Vista Fire Department No. 1, Saginaw; Three Rivers Fire Department, Three Rivers.

Mississippi: Booneville Fire Department, Booneville.

Nebraska: Plattsmouth Volunteer Fire Department, Plattsmouth.

New Hampshire: Francestown Fire Department, Francestown.

North Dakota: Mayville Fire Department, Mayville.

Oklahoma: Hydro Fire Department, Hydro.

Oregon: Wasco Fire Department, Wasco.

South Dakota: Redfield Fire Department, Redfield.

Tennessee: Tri-Community Fire Department, Inc., Collegedale; Jamestown Volunteer Fire Department, Jamestown; Sneedville Fire Department, Sneedville.

Watch for These Dates!

BEGINNING with this issue and continuing until Fall, FIREMEN magazine will feature announcements of firemen's training schools scheduled to be held throughout the United States and Canada.

Directors of such State and Provincial training schools who want to have them announced in this column are urged to send a note to that effect to the NFPA Fire Services Department. The announcement should arrive about three months before the dates of the school. In other words, fire schools scheduled for June should be announced in the April and May issues of the magazine.

For many years a number of fire school directors have also sent approximately sixty (60) copies of the fire school programs and other printed material. These are distributed by the NFPA Fire Services Department to all State and Provincial training directors.

Training School Dates

Arizona: The 5th Annual Arizona State Fire Training School will be held at Phoenix, October 17–19. For information write to Director Jake Siken, Firefighting Instruction Supervisor, Phoenix Fire Department, 49 South First Street, Phoenix.

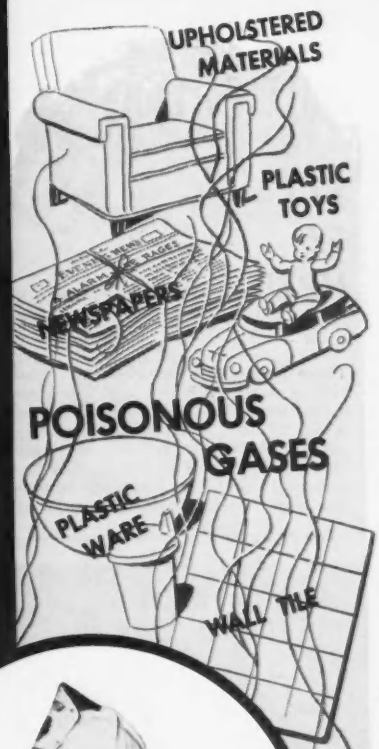
Colorado: The 40th Anniversary Convention, Tournament and Fire School will be held in Loveland, June 19–22. Write to Arthur J. Becker, Secretary, 2224 South Stuart Street, Denver 19.

Indiana: The 4th Annual Fire Administrators Seminar will be held at Purdue University, February 6–8. Write to Fire Administrators Seminar, Public Safety Institute, Purdue University, Lafayette.

Maryland: The University of Maryland will feature an Industrial Short Course on fire detection and fire protection systems, February 5–7. Also scheduled is the 6th Annual Short Course for Fire Inspectors to be held April 2–5. The NFPA "Inspection Manual" will be used as the textbook. Write to Robert C. Byrus, Director, Fire Service Extension, University of Maryland, College Park.

New Mexico: The Annual Convention and Fire School of the New Mexico State Firemen's Association will be held in Tucumcari, starting June 2. Write to Secretary-Treasurer F. W. Wynn, New Mexico State Firemen's Association, 505 East Roxana Street, Hobbs.

Why Scott Air-Paks are the best Breathing Protection Equipment you can buy!



Because:

IN SMOKE—CHEMICAL FUMES—POISONOUS GASES

You Breathe Pure Air as Cool and Fresh as an Ocean Breeze!

Modern synthetic materials, when burned, produce quick-acting poisonous gases. That's why you need breathing protection equipment that is modern and fool-proof. The Scott Air-Pak enables fire fighters to enter dense smoke, chemical fumes, and poisonous gases with complete respiratory safety. In any atmosphere, the wearer of a Scott Air-Pak breathes only cool, pure, fresh air.

The Scottoramic Mask gives unlimited vision in all directions. It helps you keep out of danger zones.

Is your fire company Scott equipped for modern rescue work? Let us show you how little it costs. You'll be amazed at the annual savings over other types of equipment. Write us today or contact your nearest Scott Distributor.

SINCE 1932 Scott FOR SAFETY—FOR SERVICE

Celebrating a Quarter of a Century of Progress

VOLUNTEER FIREMEN
Free decals for your car.
Write for yours today.

Safety Equipment Division

SCOTT AVIATION CORP.

236 ERIE STREET LANCASTER, N. Y.

Canada: Safety Supply Co., Toronto — Branches in Principal Cities
Export: Southern Oxygen Co., 15 West 57th Street, New York 19, N. Y.

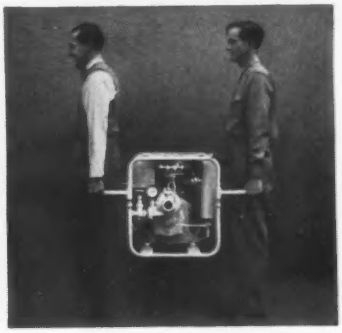
3 WORKHORSES for YOU
With Amazing Performance

HALE Portable Pumping Units

	U. S. Gallons Per Minute	Disch. Press. Lbs. Per Sq. In.
FZZ*	60 100	90 70
FZ	50 300	60 10
HPZF	11 28	200 150

*FZZ has NEW ball-type valve and Improved Priming.

These 3 pumping "Workhorses" provide amazing volumes and pressures for efficiently fighting a great variety of fires. All three units are conveniently portable by two men; can be easily mounted or carried on any type of apparatus for fighting fires while in motion from booster tank; often used to



pump from inaccessible water source into major pumper, or to fight fires direct.

Write for Circulars on Models FZZ, FZ and the HPZF—at least one of which is sure to meet your fire fighting requirements. Ask for demonstration; no obligation.

Fire Pumps in All Standard Capacities

HALE FIRE PUMP CO.
Conshohocken, Pa.

NEW!
Hydrant
RATCHET
WRENCH

4" SWING
OPENS ANY HYDRANT
EASIER-FASTER

FIRE CHIEFS SAY:
"It's the fastest, most convenient Wrench ever devised" — "the short 4" swing is wonderful to get into hard-to-reach places." "Your new Ratchet Wrench has been a life saver on many occasions."

SIZES — 1⅛" — 1¾" — 2". Each size adjustable down to 1" to fit all pentagons. Made in 16" and 20" handles. Also available in non-adjustable square and hexagon heads, please give exact size required.

16" and 20" Handles

ORDER TODAY
MONEY BACK GUARANTEE

THE S-T HYDRANT WRENCH CO.
P. O. BOX 921-M HOLYOKE, MASS.

Occupancy Fire Records

TWO more of the popular series of occupancy fire records have been published by the NFPA Fire Record Department. FR56–7 is titled "Bowling Alleys," and FR56–8 is titled "Laundries and Dry Cleaning Plants." The former is an 8-page booklet and the latter has 12 pages. Both illustrated booklets are priced at 50 cents for single copies with generous discounts granted for quantity purchases.

Each contains a listing of the common and special hazards that led to fire in these occupancies, together with a table of factors that contributed to fire damage and description of where the fires started. Also included are pertinent extracts from NFPA standards which apply to the occupancies.

Altogether 26 of these occupancy fire records have been published. A complete listing may be obtained by writing to the NFPA Fire Record Department, 60 Batterymarch Street, Boston 10, Massachusetts.

NFPA ANNUAL MEETING
Hotel Statler, Los Angeles, California
May 20–24, 1957

Fire Laws in New York State

THE New York State Volunteer Firemen's Association has a unique program through its Legislative Clearing House, whereby the Association makes recommendations to the Legislature regarding the need for clarifying laws covering the operations of volunteer fire departments. Recent incidents in that State show that such action can be timely and effective.

State Senator S. Wentworth Horton, Suffolk County, chairman of the Joint Legislative Committee on Fire Laws cited the case of a farmer who was pinned beneath a heavy tractor. Rescue was effected by the Richfield Springs Volunteer Fire Department Emergency Squad. Such "acts of mercy" are now legal in this State for volunteer fire companies because of a 1956 law enacted upon recommendation of the Committee.

The lower courts in the State have recognized that the saving of a life is a proper fireman's function. However, according to Senator Horton, a recent decision of the Appellate Division of the New York State Supreme Court held that where a man had a heart attack in his own home, and there was no fire, the emergency was "private" and not "public." In anticipation of the decision, the Joint Legislative Committee on Fire Laws recommended passage of three bills to permit volunteer companies to act in "emergencies" instead of "public emergencies." Two of these bills became Chapters 438 and 439 of the New York State Laws of 1956. The third was vetoed by Governor Harriman.

On January 9, Assemblyman Charles A. Cusick, Cayuga County, who was Acting Chairman of the Committee mentioned the crash of a Conservation Department airplane which occurred on the previous day. In the crash State Comptroller Arthur Levitt, the pilot and co-pilot all were injured. The Rhinebeck Fire Department Rescue Squad ambulance made the rescues and brought the trio to the Northern Dutchess County Health Center.

Assemblyman Cusick pointed out that if Chapters 438 and 439 had not been changed, the plane crash on private property might have been regarded as a "private emergency," so that it would have been "illegal" for the volunteers to effect rescue.

NEW DURA-FOG NOZZLE by POWHATAN

NAMED FOR ITS DURABILITY

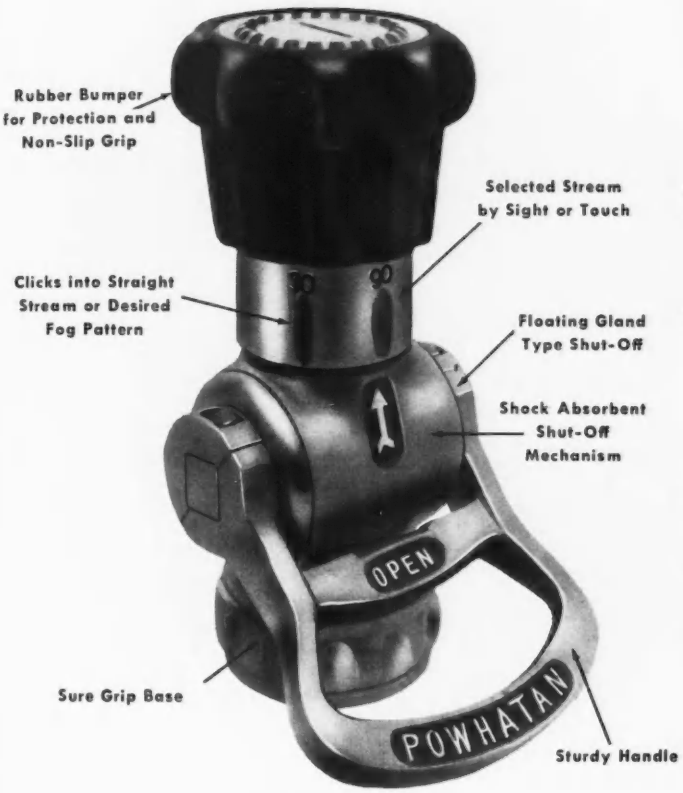

Rubber Bumper for Protection and Non-Slip Grip
Selected Stream by Sight or Touch
Clicks into Straight Stream or Desired Fog Pattern
Floating Gland Type Shut-Off
Shock Absorbent Shut-Off Mechanism
OPEN
POWHATAN
Sure Grip Base
Sturdy Handle

PLATE No. 261

NO LEAK in over a million shut-offs . . . test proof of durability!

100% PERFORMANCE TEST for every Dura-Fog Nozzle!

Performance Test Data for 1½" Size

Water Pattern	GPM	Reach	Nozzle Pressure
STRAIGHT STREAM	57 62	85′ 105′	100 psi 125 psi
30° FOG PATTERN	60 65	40′ 43′	100 psi 125 psi
60° FOG PATTERN	65 68	30′ 35′	100 psi 125 psi
90° FOG PATTERN	72 75	20′ 22′	100 psi 125 psi

Contact your local distributor today, write POWHATAN direct for all the facts on the new Dura-Fog Nozzle. . . . Ask for our free Catalog "A".

POWHATAN BRASS & IRON WORKS
RANSON, WEST VIRGINIA
Phones 93 & 94 Charles Town, West Virginia · Established 1892

Specify HALE

- Completely Modern
- Reliable
- Rugged
- Compact
- Conservatively Rated
- Sold thru Mfrs. of Quality Apparatus

VALUABLE TIME SAVED: While we have always emphasized *Reliability* of priming rather than *Speed* of priming, we cannot help taking pride in the results obtained in the test shown in this picture. PRIMING TIME (Water out the Nozzle) WAS BETTER THAN 18 SECONDS FOR THIS HALE QL PUMP ON A 22-FOOT LIFT! This was done at reasonable Engine speed in both series and parallel.

Minimum specifications require priming on a 10-foot lift in 30 seconds. A substantial reserve on all HALE products is a consistent HALE policy.

Send today for QL Bulletin 334. HALE pumps are built in all standard capacities.

HALE FIRE PUMP CO.
Conshohocken, Pa.

CAIRNS
FIRE HELMETS

Top-Grain Leather

No. 5A
The "NEW YORKER"
REGULATION

No. 550
The "SEAMLESS"
DROP BRIM

No. 900
The "CLIFTON"
REGULATION

No. 725
The "CAVALIER"
DROP BRIM

Flint-Flex Plastic

Write for Catalog 350

CAIRNS & BRO., Inc.—Allwood, Clifton, N. J.

SINCE 1836

Atomic Energy Training Courses

THE Safety and Fire Protection Branch, U. S. Atomic Energy Commission, Washington, D. C., is offering two separate one-week training courses for AEC and AEC-contractor employees. Both will be conducted at U. S. Naval Structural Firefighting Schools. One will be in San Francisco, California, May 6–10; and the other course will be in Norfolk, Virginia, July 22–26.

For the first time an advanced course will be offered at Norfolk, August 5–9. It will feature a detailed treatment of the following subjects: organization for fire safety, water supply, fire spread, and special hazards. Instruction will be given by a number of AEC and contractor fire protection engineers.

Men designated to attend this advanced course should be senior officers of fire departments, full-time fire inspectors, safety engineers with fire protection responsibilities, or other engineers who require an understanding of fire protection engineering. All of the courses are directed by F. L. Brannigan, Safety and Fire Protection Branch, Washington, D. C., who established the Norfolk school for the Navy.

Fire departments and other organizations wishing to send students should notify the Washington Safety and Fire Protection Branch through the appropriate AEC Operations Office. Notification should include the full name and mailing address of the student so that he may be sent detailed information concerning the exact location of the training, his mailing address, and emergency telephone number. For more complete details write to the U. S. Atomic Energy Commission, Washington, D. C., and ask for "Accident and Fire Prevention Information Paper No. 22, October 31, 1955."

Got a Used Ladder Truck?

THE Horicon, Wisconsin, Fire Department is interested in obtaining a used ladder truck. Fire departments which have such extra apparatus in serviceable condition are asked to write to Secretary Glenn Clarke, Horicon Fire Department, 416 N. Cedar Street, Horicon, Wisconsin.

Jeep for Brush and Grass Fires

CHIEF Johnny Jilg of Walla Walla County Fire Protection District No. 4, Walla Walla, Washington, reports that he has achieved good results with a specially equipped four wheel drive jeep for grass and brush fire fighting. The vehicle was placed in service last summer to combat nuisance fires while the larger, more expensive apparatus can be saved for other duty.

The jeep is powered by a 115 horsepower engine and has a 120 gpm Edwards pump rated at 350 pounds, driven by an Onan two cylinder motor. The tank carries 187 gallons and provides water supply for approximately 25 minutes. The tank is baffled and treated with a wet water solution. As shown in the photo the pump motor and reel of 150 ft. high pressure booster hose is carried on top. Two 5 gallon back pack pumps are carried on the rear fenders in addition to a one quart carbon tetrochloride extinguisher, a 25 lb. CO_2 extinguisher, and a 20 lb. dry chemical extinguisher.

The vehicle is also equipped with two-way radio. Chief Jilg reports that when the tail gate is dropped to a horizontal position, the 5 ft. square bed provides considerable room for carrying used fire hose back to the station.

"Questions and Answers on NFPA Committee Activities"

AN INFORMATIVE 28-page, 6- by 9-in. booklet with the above title has recently been published by NFPA. Prepared in an easy-to-read question and answer form, it describes how NFPA committees are selected, the preparation of NFPA standards for adoption by the Association, committee meetings, regulations and procedures, and provides other helpful information. The booklet also contains a list of NFPA technical standards.

Copies may be obtained from the NFPA Publications Department for $1.00 each.

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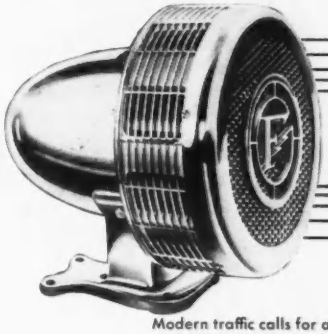

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For Gas Mask Fitting

A BULLETIN of the U. S. Atomic Energy Commission, covering accident and fire prevention information, contains some helpful tips on the proper fitting of gas masks. It mentions that a few drops of isoamyl acetate on cotton will help to indicate whether the mask wearer has obtained proper securement of the facepiece and headpiece.

Isoamyl acetate is a flammable liquid with a ripe banana or nail polish odor, detectable in a concentration as low as one part per million parts of air. A mask or respirator, equipped appropriately with a source of compressed air or with a canister or filter cartridge containing activated charcoal, is donned with headstraps pulled into position. A little isoamyl acetate on cotton is passed slowly around the edges of the mask, without touching either the wearer's face or the mask. If the wearer can detect the odor, a leak is indicated. The mask should then be adjusted until no odor can be detected, and a proper fit is assured. In following this procedure with isoamyl acetate, the wearer's eyes should be protected.

This isoamyl acetate technique will not work for masks fitted with an aerosol filter only. Canisters or filters containing charcoal can be substituted for such aerosol filters until the fitting test has been completed.

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Colonel H. R. Brayton

We regret to announce the death of Col. H. R. Brayton, State Coordinator of Survival Research & Planning, Texas A. & M. College, Texas.

Colonel Brayton was a member of the NFPA Committee on Firemen's Training for more than 15 years and was well known to fire service members for his contributions in the training of firemen. He was Professor of Inorganic Chemistry at Texas Agricultural and Mechanical College from March 1, 1917 to September 1, 1947. In October, 1929 he organized the Texas Firemen's Training School at the College and directed activities of the school until October, 1955. In 1954 he organized and directed the Texas Rescue Training School. In October, 1955 he was granted leave of absence from the College to work with the Texas Governor's office and became Coordinator of Survival Research & Planning in the Division of Defense and Disaster Relief, with offices at Texas A. & M.

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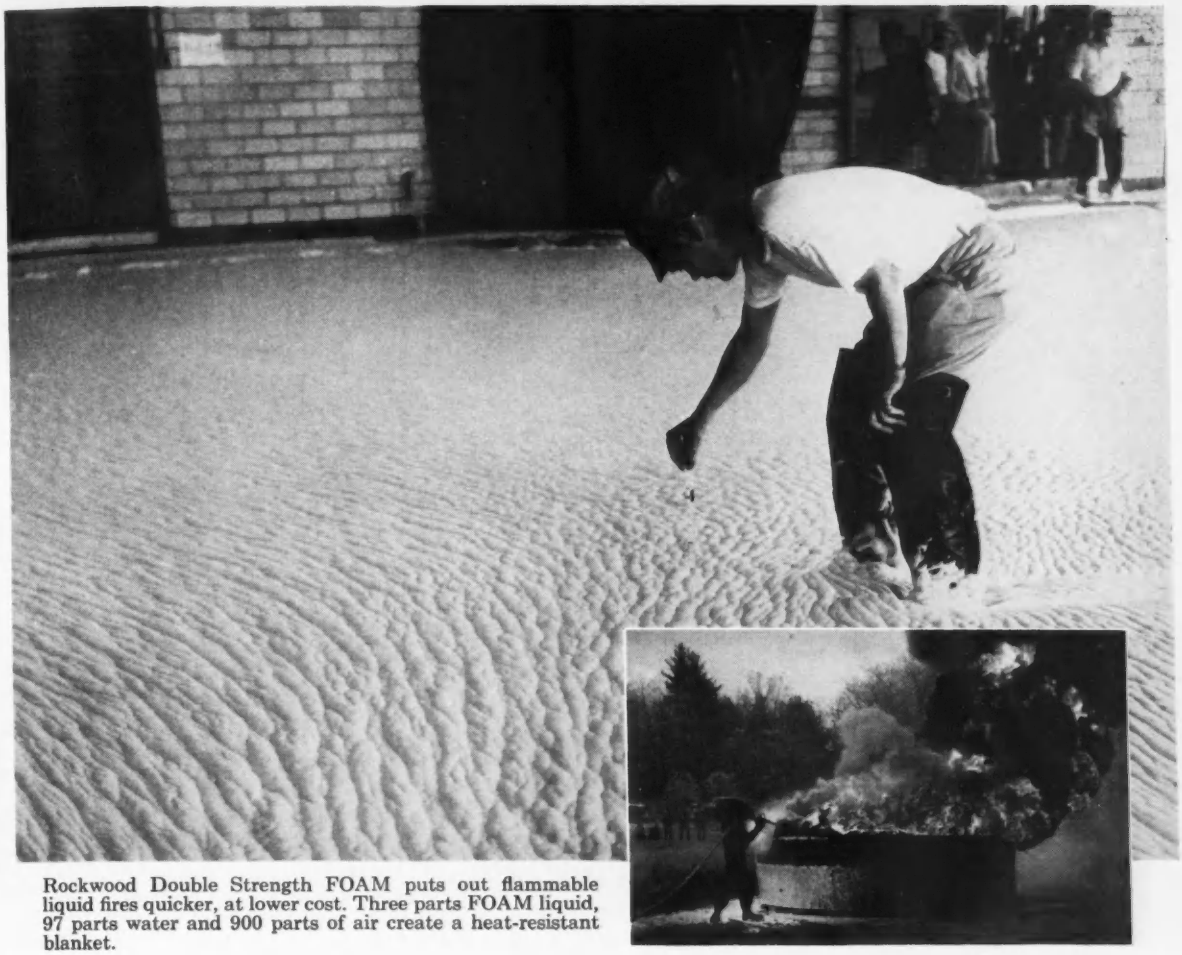

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Public utility and industrial use of MSA "Explosimeter" for explosive vapor identification is spreading to progressive fire departments. . . . Suggestion — check on Hoosier canvas or nylon salvage covers soon. Write for Catalog No. 57-F1 to *Hoosier Tarpaulin & Canvas Goods Co., Inc.*, Box 574, Indianapolis 6, Indiana. . . . A new modern plant and a change in name is announced by the makers of Barton-American front and midship mounted and portable pumps. New name and address is *American Fire Pump Co.*, 803 Main Street Road, Battle Creek, Michigan. . . . Fred B. Alger, New England States representative for the Seagrave Corporation, passed away January 7. Mr. Howard Steff, Fred's son-in-law, succeeds him in this territory.

Smoke ejectors are proving their value in controlling ventilation in building fires and forcing fresh air with or without a deodorant into fire-scarred buildings. Contact *Super Vacuum Mfg. Co., Inc.*, 319½ East 17th Avenue, Denver 3, Colorado. . . . Here's a way to promote fire prevention and at the same time build funds for equipment! Contact manufacturers of "Sparky" Fire Department items (dolls, coats, ties, etc.) and arrange for fire department sales activities in your community. Write for descriptive manufacturers' folder to *NFPA Public Relations Dept.*, 60 Batterymarch St., Boston 10, Mass. . . . Free "Sparky" 1957 Calendars for your home and your station house are yours for the asking from *The Osborne Company*, Norwood Park, Cincinnati 12, Ohio.

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News Items and New Equipment of Interest to the Fire Service

"Municipal Fire Administration," 1956 clothbound edition, 442 pages, $7.50 postpaid, is now ready at *International City Managers' Assn.*, 1313 E. 60th St., Chicago 37, Illinois. . . . Are you interested in how radio network can assist a rural community mutual aid program? Read the Greenfield, Mass., tri-state communications story. Free copies are available through *General Electric Co., Communications Equipment*, Electronics Park, Syracuse, New York.

To be sure your batteries are "up" and that there's plenty of power for sirens, lights and 2-way radio, equip apparatus with heavy-duty alternators. Get the facts today from *Leece-Neville Co.*, Cleveland 3, Ohio. . . . Personal car identification in Scotchlite for day or night visibility is claimed for the fire emblem sticker by *J. A. Fenton & Associates*, 114 Merlham Drive, Madison 5, Wisconsin. . . . A fire badge and money clip combination attaches or detaches to belt, shirt or coat pocket. Use it for presentations, awards and for off duty use. Write to *Nielsen-Rionda, Inc.*, Dept. 20, 40 John St., New York 38, N. Y. . . . Heavy-duty safety belt and shoulder harness for drivers, tillermen and others are a specialty of *Rupert Parachute Co.*, Wheeling, Illinois. . . . A mechanical back-up alarm for apparatus, completely automatic, is announced by *E. D. Bullard Co.*, 275 Eighth St., San Francisco 3, Calif

For municipal and industrial fire departments, a new 16-page illustrated catalog covers the "Justrite" line of flashlights, safety lights, lanterns and safety cans. Write for catalog No. 566 to *Justrite Mfg. Co.*, Dept 66, Chicago 14, Illinois. . . . A new plastic liquid coating claimed to make clothing waterproof and flame resistant is SAV-COTE, manufactured by *Sav-Cote Laboratory*, Box 95, Belleville, N. J. . . . Disaster control tools designed for a great variety of rescue operations are illustrated and described in a 12-page manual offered by *Blackhawk Mfg. Co.*, Dept. RE, 5325 W. Rogers St., Milwaukee 46, Wisc. . . . "Emergency Power for Your City Water Works" is the title of an informative booklet just released by *Detroit Diesel Engine Div., General Motors Corp.*, Detroit 28, Mich. . . . A new MCA-105-B 2-way mobile communications unit for use on the 25–54 mc band is announced by the *Mobile Communications Dept., Allen B. Du Mont Laboratories, Inc.*, 760 Bloomfield Ave., Clifton, N. J. . . . Standout auto emblems (4") of polished, cast aluminum in bright colors are now offered by *Sta-Dri Products Co.*, 147–47 Sixth Ave., Whitestone 57, L. I., N. Y. . . . Mr. Paul R. Warren is the new general sales manager for Fyr-Fyter Div. recently purchased from Pyrene C-O-Two Corp. by *Fyr-Fyter Co.*, Dayton, Ohio.

European Type Aerial Ladder

Four Wheel Drive Auto Company of Clintonville, Wisconsin, is manufacturing this new aerial ladder truck, demonstrated recently at the 83rd IAFC Conference. It features an 85 ft. Holland-made Geesink aerial ladder mounted on the chassis. The fully hydraulic, four-section steel aerial ladder folds down over the top of the open cab, 30-ft. long truck which has a 213-in. wheel base. Note compartment space and outriggers.